

# WINTER WEATHER IMPACT ON AIRLINE OPERATIONS

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# The Basics

- Strategic planning for significant events begins several days in advance of the event.
  - Manpower
  - De-Icing equipment and fluid reserves
- Strategic planning involves converting the forecast into an airport impact forecast.
  - Anticipated arrival and departure capacity
    - Frequency of runway treatment
    - Duration of runway closure for treatment
    - Ability to exit runway
  - Anticipated delays

# The Basics (cont.)

- Strategic planning involves forecast uncertainty
  - Plan to operate 70% capacity but ready to reduce to 50%
  - Cancel as early as practical – advise customers
- Strategic planning involves details not offered in the TAF
  - Hourly snow accumulation
  - Liquid content of snow
- Success requires cooperation from the City and local ATC
  - We are blessed with excellent teams on both sides at ORD

# It All Begins With The Forecast

- The need for information begins 24-36 hours in advance of the storm.
- The level of detail and information need changes as the storm approaches.
- Within 6-8 hours of the storm, forecasting transitions to now-casting
  - Continuous monitoring and updates
  - Continuous dialogue between decision-makers and forecasters

# December 20<sup>th</sup> 2010

- Initial forecast was for moderate snow.
  - Anticipated airport capacity 48-56/hour.
  - Cancelations implemented, customers forewarned
- Snow intensity increased to heavy as it passed through ORD.
  - Convective Event – lightning observed near IKK
  - Airport capacity briefly drops to 0!
    - Air holding and diversions
- Airport slowly recovers
  - Catch up on runway treatment
  - Priority to departures – Hold Over Time
  - Recover diversions
  - Airport capacity slowly increase – delays increase 2X to 3X
  - More “tactical” cancels – but customers already at airport

**Closing Slide**

**Thank You!**